S No.	MINI-PROJECT DESCRIPTION	Duration: 5 hours

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Given the following table containing information about employees of an organization, develop a small java application, using JDBC, which displays a menu for the user consisting of following options :

1. Add Record
2. Modify Record
3. Delete Record
4. Display one Record
5. Display All
6. Exit

Use Scanner class to accept input from the user.

1. Add Record :

When the user input is 1, the user should be asked to enter the following details one by one (again using Scanner).

Employee's First Name
Employee's last Name
Date of Birth
Department
Designation
Basic Salary
Educational Qualification
1st Line of Address
2nd Line of Address
City
Pin
Phone

The data entered by the user should be stored in two different database tables. Name them as Employee_table and Employee_Personal_info_table. You are requested to create these tables manually using SQL plus and insert the data using Add Record option of the application that you are creating.

Employee_table :

Emp No.	First Name	Last Name	Join Date	Designation	Dept	Basic Salary

1001	Ashish	Kulkarni	Current date	Architect	R&D	50000
1002	Sushma	Shah	Current date	Officer	Purchase	30000
1003	Rahul	G	Current date	Clerk	Stores	10000
1004	Chahat	Punja	Current date	Manager	HR	12000
1005	Ranjan	Srivatsava	Current date	Clerk	Accounts	20000
1006	Suman	J	Current date	Officer	Accounts	23000

Emp no. is generated using Sequence. Let the first emp no. be 1001.

Employee_Personal_Info Table :

Emp No.	Date of Birth	Educational Qualification	Address		City	Pin	Phone
			1st Line	2nd Line			
1001	23/03/1991	B Tech					
1002	03/05/1989	MBA					
1003	17/11/1990	B A					
1004	12/07/1987	MBA					
1005	20/01/1988	B Com					
1006	09/06/1989	M Com					

(Values for each row may not necessarily be as given in the table. Row data can be anything. We have kept the address, city and other columns blank here but you are expected to insert values for each of these columns)

First insert the relevant data in Employee_table and if the insertion is successful, display a message “Record inserted successfully in Employee_Table”. In case, there is some problem inserting record in Employee_table, it should display a message “Problem inserting the record in Employee_Table”. And the control should be reverted back to the main menu.
If the insertion in Employee_Table is successful, then insert the relevant details in Employee_personal_info_Table. In case, there is some problem inserting values into employee_personal_info_table, then it should display two messages "Problem inserting the record in Employee_Personal_Info_Table.. " and "Rolling back the record inserted in Employee_table". If the insertion is successful, then it should display the message “Record inserted in Employee_Personal_Info_Table successfully". Commit the records, only if the insertions are successful in both the tables.

2. Modify Record :

If the user selects option 2, i.e. Modify Record, the user should be asked to enter the employee no. whose data he needs to modify. When the user enters the employee no., the application should display the employee's details like employee no., designation, department and basic salary. If the employee no. is not present, it should display appropriate error message. The user should be able to change only the data he wants to modify. For example, the user may want to change only basic salary. In that case, he will not enter anything, when he is asked to enter either designation or department. He will press enter against those fields where he does not want any change. He will only enter basic salary and your program should modify only the basic salary for that row, leaving the other columns as they are. Similarly, when the user wants to change only designation, the application should allow him to keep the other fields blank and appropriately modify only the designation column in the database table.

3. Delete Record :

When the user selects option 3, i.e. Delete Record, the application should ask him to enter the employee no. and if the employee no. does not exist, it should display appropriate error message. If the employee no. exists, it should ask, do you want to delete the record of employee, whose emp no. is XXXXXX. If he presses Y or y, the record should be deleted. If he presses any other key, the record should not be deleted. An appropriate error message should be displayed in both the cases(whether the record is deleted or not). Remember, the details pertaining to this employee should be deleted from both the tables.

4. Display One Record

When the user selects option 4, i.e. Display One Record, the application should ask him to enter the employee no. and if the employee no. does not exist, it should display appropriate error message. If the employee no. exists, it should display all the details of this employee, in the following manner :

Employee No :
Employee Name : (Both first name and the last name should be displayed here)
Join Date :
Designation :
Department :
Basic Salary :
Date of Birth :
Educational Qualification :
Address : 1st Line
2nd Line
City

Pin

Phone :

5. Display all Records

When the user selects option 5, i.e. Display all Records, the application should display all the records with selected columns as given below : (Ignore alignment concerns)

Emp ID	Full Name	Date of Birth	Designation	Department	Net Salary
1001	Ashish Kulkarni	1991/03/23	Architect	R&D	72000
…….	……	……..	……..	…….	…….
…….	……	……..	……..	…….	…….
…….	……	……..	……..	…….	…….

(Net Salary is calculated as Basic+HRA+DA-IT. HRA is calculated as 20% of Basic, DA is 40% of Basic and IT is calculated as 10% of Gross(BASIC+HRA+DA))

6. Exit

When the user wants to stop using this application, he will select option 6 and he should be allowed to exit from this system. It should display a message on the system

"Thank you for using this application"